prospectively collected over a 30-month period. Multivariate analysis investigated effects of best practice achievement, age and ISS on Glasgow Outcome Score (GOS) and 30 day mortality in younger and elderly patient groups.
Results: In younger patients (n = 1393), four of the 10 best practice indicators analysed showed independent significance in improving GOS ($p < 0.05$ for all), and one in independently reducing mortality ($p < 0.05$). In elderly patients (n = 896), none of the trauma best practice indicator significantly improved either outcome measure. ISS and age were independent, additive factors for GOS and mortality ($p < 0.001$).
Conclusions: With outcomes significantly worse in older patients, the lack of improvement with "best practice" indicates an important area for wider study, and may be due either to an underestimation of their injury severity, or best practice indicators inappropriate for this group.

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0431: EXTENDING INDICATIONS IN ROBOTIC PARTIAL NEPHRECTOMY: THE DEVELOPMENT OF THE PRACTICE AFTER 200 CASES

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Aim: Robotic partial nephrectomy (RPN) is becoming the gold standard technique in the surgical management of small renal masses. Our aim is to assess development of RPN within one centre over 5 years to measure quality outcomes and changes in case complexity.
Method: A prospective database of 200 elective cases from one institution was chronologically split into 4 groups of 50 patients: peri-, intra-and post-operative outcomes were compared. We compared length of stay, tumour size, warm ischaemic time (WIT), operative time and PADUA score.
Results: 181 cases were performed transperitoneally with 4 conversions to radical nephrectomy for tumour factors. There were no conversions to open surgery. Complications consisted of 1 transfusion, 5 positive margins and 3 Clavien IIIa/b complications.
In comparing groups 1 and 4, mean PADUA score increased from 7.11 to 7.63 ($p = 0.045$), mean length of stay decreased from 3.76 to 2.6 days ($p < 0.001$), mean WIT decreased from 18.3 to 16.4 minutes ($p = 0.0245$), mean operative time decreased from 180 to 162 min ($p = 0.012$).
Conclusion: Despite taking on more complex cases, we have reduced length of stay, WIT and operative times. With increased experience, it is possible to broaden the suitability of patients for RPN without compromising outcomes.

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Posters of distinction prize session 1

0166: THE ROLE OF SURGICAL TRAINEES IN IMPROVING MEDICAL STUDENT ENGAGEMENT WITH SURGERY

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Aim: With changes to postgraduate training and a reduction in the number of surgical foundation posts, the student experience of surgery is evermore important for recruiting the surgeons of tomorrow. We undertook a quality improvement project to examine whether a structured, trainee-led teaching programme can improve interest in surgical careers.
Methods: During a five-day general surgery attachment, fourth year medical students were mentored by a surgical trainee. A trainee-led structured teaching programme was centred on the team's theatre list.
Results: 46 students participated. 58% reported more interest in a surgical career immediately after the project. Students enjoyed having a mentor, helping with clinical tasks and feeling more integrated within the team. Six months after the project, 45% reported more interest in surgery than at baseline.
Discussion: We have shown that a brief trainee-led programme can increase student interest in surgical careers and that this interest persists over time. As students enjoy practical sessions and being involved in team activities, the operating theatre is a good environment for trainees to discuss surgical training and engage students in teaching. We propose this model should be expanded to all surgical specialties to increase student exposure to a range of surgical careers.

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0965: HEAD AND NECK CANCER-RELATED LYMPHOEDEMA AND POTENTIAL SURGICAL OPTIONS

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Aim: To report on the increasing burden of head and neck cancer-related lymphoedema (HNCRL), and to identify and evaluate the efficacy of surgical techniques for the treatment of this condition.
Method: Medline was searched from inception to identify relevant articles on surgical techniques used for the treatment of HNCRL. All studies reporting on the application and efficacy of these techniques were included.
Results: The epidemiology of head and neck cancer is changing, and more patients are surviving the disease and living for protracted periods with HNCRL. Conservative therapies yield reasonable outcomes but require lifelong compliance. Our literature search retrieved six studies reporting on the application of surgery to the management of HNCRL, and the current techniques include liposuction, lymphatico-venous bypass, lymphatico-lymphatic bypass and autologous lymphatic transfer. Whilst yielding promising outcomes, these reports are observational studies and are limited by small sample sizes.
Conclusion: Surgery presents an attractive, potentially curative alternative to time-consuming, lifelong compliance with compression and physiotherapy for the management of HNCRL. However, there remains clear research needs. Standardized methods for diagnosing and characterizing HNCRL are lacking, and randomized controlled trials are necessary to elucidate the true effectiveness of these techniques. The management of HNCRL is an exciting challenge.

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0217: WEEKEND HOSPITALIZATION AND MORTALITY RATES

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Aims: Recent publications suggest higher mortality in patients admitted at the weekend. The aim of this study is to analyse whether there is an increased risk of death when admitted on a weekend compared to weekday admissions in a single Health Board in Wales.
Method: A retrospective observational study was conducted over a 3-year period from April 2012 to March 2015 inclusive. We analysed the number of deaths on each day of the week. These deaths were correlated to their day of admission.
Results: 448,827 patients were admitted during this 3-year period. 8099 deaths occurred. The crude mortality rate for elective and emergency admissions on a weekday was 1.5-1.7% whereas it was 2.8-2.9% for all admissions on the weekend. The average mortality rate for emergency admissions over the weekend was 3.2% with 95%CI [3.05% to 3.36%] and for the weekdays was 3.05% with 95% CI [2.97% to 3.13%]. No significant difference for mortality rate by weekend and weekday ($p=0.243$) when excluding elective admissions.
Conclusions: This study clearly demonstrates that mortality rates are unrelated to the day of admission in our Health Board. This suggests that

reduction in weekend mortality should not be a driver for seven day working for doctors.

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0308: SYSTEMATIC REVIEW AND META-ANALYSIS OF PROGNOSTIC VALUE OF CIRCULATING TUMOUR CELLS (CTC) IN EARLY BREAST CANCER

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Aim: Prognostic value of circulating tumour cells (CTC) in breast cancer is currently under investigation. This systematic review with meta-analysis aimed to measure the evidence on prognostic relevance of CTC in early breast cancer presented in recent published studies.
Method: A detailed search was made for published primary studies of the prognostic value of CTC in early breast cancer. After review and quality assessment, 22 studies with data on CTC status and disease recurrence and breast cancer mortality, were included. Primary outcomes analysed were hazard ratios for disease-free survival (DFS) and overall survival (OS) between the patient groups with positive and negative detection of CTC. Meta-analysis calculated the pooled hazard ratio (HR) with 95% confidence intervals (CIs) as the overall effect measure on DFS and OS using fixed and random effects models.
Results: 22 studies enrolling total of 5724 patients were eligible for the systematic review and meta-analysis. The pooled HR for ↓DFS and ↓OS for CTC positive status were 2.81 (CI: 2.20-3.61) and 2.74 (CI: 2.20-3.41) respectively.
Conclusion: This review and meta-analysis found that the presence of CTC in early breast cancer was associated with a nearly 3 fold greater hazard of recurrence and death compared with non-detection.

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0836: SURGERY FOR INFANTILE HYPERTROPHIC PYLORIC STENOSIS: A TEN YEAR NATIONAL COHORT STUDY

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Aims: Assess trends in: (i) epidemiology of infantile hypertrophic pyloric stenosis (IHPS); and (ii) service provision of pyloromyotomy in England.
Methods: Hospital Episode Statistics (HES) data were used to analyse all IHPS admissions in England 2002-2011. Office for National Statistics provided birth rates. Data are presented as median (IQR).
Results: 9686 infants (83% male) underwent pyloromyotomy. Age was most commonly 29-90 days (n=6563, 67.8%), then 7-28 days (n=2945, 30.4%). Annual incidence was approximately static at 1.5/1000 live-births. Surgery was performed in 22 specialist (SpCen) and 39 non-specialist (NonSpCen) centres. The proportion treated in SpCen increased linearly by 0.4%/year (r=0.76, p=0.01, slope 0.43 [0.12-0.73]). 6221 (64%) infants were transferred to SpCen for surgery. Annual case-volume in SpCen vs. NonSpCen was 40 (24-53) vs. 1 (0-3). The highest volume SpCen performed 85/year (73-117) vs. 11/year (9-15) NonSpCen. 17/39 (44%) NonSpCen averaged less than one/year: 4/39 (11%) greater than five/year. The steady increase in laparoscopic surgery reached 20-23% 2009-2011: significantly more were laparoscopic in SpCen (11% vs. 1%, p=0.000, OR 12.31 [5.83-25.98]).
Conclusions: IHPS incidence appears lower than previously reported. The low procedural incidence in NonSpCen would appear to be contrary to NCEPOD guidance. Initial adoption of laparoscopic pyloromyotomy has plateaued.

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1349: ZERO ISCHAEMIA OPEN PARTIAL NEPHRECTOMY: A SUITABLE ALTERNATIVE TO THE MINIMALLY INVASIVE APPROACH

S.A. Ehsanullah*, B. Kelly, Z. Shah. *Alexandra Hospital, Redditch, UK.*

Aim: Open partial nephrectomy has evolved over time from an open technique to minimal access approaches including laparoscopic and robotic. Our minimal access open technique includes stenting all patients and a supra 12th 6-8cm mini-flank incision without renal artery ischaemia.
Methods: A prospectively populated database of a single surgeon was analysed. 71 patients underwent a partial nephrectomy over a 6 years. Data for operative time, blood loss, change in renal function, complications, histopathology and RENAL nephrometry was analysed.
Results: A single surgeon performed 71 partial nephrectomies over a 6 year period. Mean operative time was 72 minutes. Mean estimated blood loss was 608 mls with one patient receiving a blood transfusion. The mean pre and post-operative haemoglobin levels were 144 and 112 g/l. The mean pre and post-operative creatinine levels were 82 and 103 Umol/L. Overall complication rates were comparable with the BAUS audit. There were 8 Grade 2 (Clavien-Dindo) complications and 1 major complication (Clavien IIIa). Median follow up was 38 months with no local recurrence or progression of disease with 5 patients having a positive margin (7%).
Conclusion: Our results demonstrate than an open partial nephrectomy with a mini-incision has satisfactory outcomes relative to the BAUS audit data.

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0277: PHARMACOLOGICAL MANAGEMENT TO PREVENT ILEUS IN MAJOR ABDOMINAL SURGERY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Aim: Prolonged ileus is a common complication following gastrointestinal surgery, with an incidence of up to 40%. Investigations examining pharmacological treatment of ileus have proved largely disappointing; however, recently several compounds have been shown to have benefit when used as prophylaxis to prevent ileus.
Objective: This review aimed to evaluate the safety and efficacy of compounds which have been recently developed or repurposed to reduce bowel recovery time, thereby preventing ileus.
Data sources: A systematic review of the MEDLINE, EMBASE and Cochrane Library in addition to manual searching of reference lists up to April 2015.
Results: A total of twenty-one studies were included in the final analysis. The μ-opioid receptor antagonist Alvimopan and serotonin receptor agonists appeared to significantly shorten the duration of ileus. The use of Ghrelin receptor agonists did not appear to have any effect in five trials. No publication bias was detected.
Conclusions: There is evidence to make a strong recommendation for the use of Alvimopan in major gastrointestinal surgery to reduce postoperative ileus. Further randomized trials are required to establish whether serotonin receptor agonists are of use. Identifying a low-cost compound to promote bowel recovery following surgery could reduce complications and shorten duration of hospital admissions.

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1105: TRAINEE APPENDICECTOMIES - IS AN INTEGRATED 'CEPOD ROTA' BENEFICIAL FOR SHO'S?

A. Gordon*, M. Lupi, M. Hassam. *Croydon Univerity Hospital, London, UK.*

Aims: Although appendicectomies were previously regarded as a routine procedure for junior trainees, they are increasingly performed by more senior trainees [2]. Nevertheless, progression to higher surgical training in General Surgery is partly dependent on competence in index procedures such as appendicectomies.
Methods: We retrospectively analysed records of 221 appendicectomies performed between October 2014 and October 2015 in a hospital with a dedicated week attached to the CEPOD team, integrated into the general